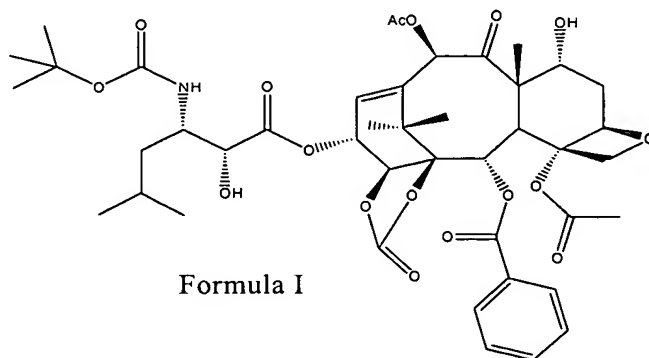


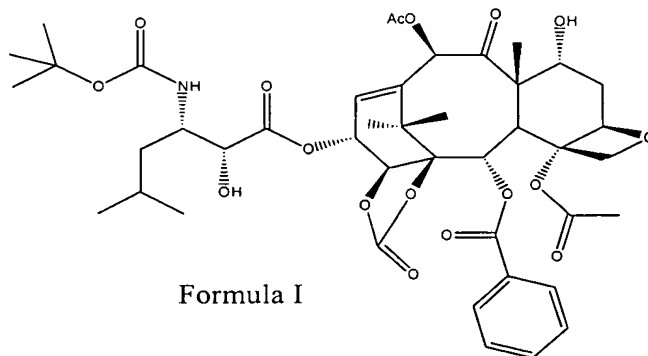
12. (New) A process for preparing a compound of Formula I,



Formula I

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comprising reacting 13-(N-Boc- β -isobutylisoserinyl)-14 β -hydroxy-baccatine III 1,14-carbonate with diazabicyclo[5,4,0] 7-undecene in methanol or THF.

13. (New) A process for preparing a compound of Formula I,



Formula I

comprising treating 13-(N-Boc- β -isobutylisoserinyl)-14 β -hydroxy-baccatine III 1,14-carbonate with methylene chloride or chlorinated solvents in the presence of one or more aliphatic alcohols and basic alumina for from 1 hour to 14 days.

14. (New) The process of claim 13, wherein the one or more aliphatic alcohols are selected from methanol, ethanol, propanol, or a combination thereof.

15. (New) A process for preparing 13-(N-Boc- β -isobutylisoserinyl)-14 β -hydroxy-baccatine III 1,14-carbonate or 13-(N-Boc- β -isobutylisoserinyl)-14 β -hydroxy-baccatine V 1,14-carbonate, comprising:

- a. reacting 14 β -hydroxy-10-deacetylbaecatine III or 14 β -hydroxy-10-deacetylbaecatine V with a silylating agent to provide a 7-triethylsilyl 14 β -hydroxy-10-deacetylbaecatine III or a 7-triethylsilyl 14 β -hydroxy-10-deacetylbaecatine V;
- b. reacting the 7-triethylsilyl 14 β -hydroxy-10-deacetylbaecatine III or the 7-triethylsilyl 14 β -hydroxy-10-deacetylbaecatine V with phosgene to provide a 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-deacetylbaecatine III or a 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-deacetylbaecatine V;
- c. reacting the 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-deacetylbaecatine III or the 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-deacetylbaecatine V with a LiHMDS to provide a lithium salt of the 10-hydroxyl group of the 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-deacetylbaecatine III or a lithium salt of 10-hydroxyl group of the 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-deacetylbaecatine V;
- d. reacting the lithium salt of the 10-hydroxyl group of the 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-deacetylbaecatine III or the lithium salt of the 10-hydroxyl group of the 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-deacetylbaecatine V with an acetylating agent to acetylate the 10-hydroxyl group to provide a 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-acetylbaecatine III or a 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-acetylbaecatine V;
- e. reacting the 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-acetylbaecatine III or the 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-acetylbaecatine V with (4S,5R)-N-Boc-2-(2,4-dimethoxyphenyl)-4-isobutyl-1-oxazolidine-5-carboxylic acid to form a C-13 esterified 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-acetylbaecatine III or a C-13 esterified 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-acetylbaecatine V; and
- f. removing the 7-triethylsilyl group from the C-13 esterified 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-acetylbaecatine III or the C-13 esterified 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-acetylbaecatine V to provide a C-13 esterified 1,14 carbonate 7-hydroxyl 14 β -hydroxy-10-acetylbaecatine III or a C-13 esterified 1,14 carbonate 7-hydroxyl 14 β -hydroxy-10-acetylbaecatine V; and

g. removing a dimethoxybenzylidene group from the C-13 esterified 1,14 carbonate 7-hydroxyl 14 β -hydroxy-10-acetylbaccatine III or the C-13 esterified 1,14 carbonate 7-hydroxy 14 β -hydroxy-10-acetylbaccatine V

to provide 13-(N-Boc- β -isobutylisoserinyl)-14 β -hydroxy-baccatine III 1,14-carbonate or 13-(N-Boc- β -isobutylisoserinyl)-14 β -hydroxy-baccatine V 1,14-carbonate.

16. (New) The process of claim 15, wherein the silylating agent is triethyl chlorosilane.

Aⁿ 17. (New) The process of claim 15, wherein the 7-triethylsilyl 14 β -hydroxy-10-deacetylbaccatine III or the 7-triethylsilyl 14 β -hydroxy-10-deacetylbaccatine V is reacted with phosgene by dissolving the 7-triethylsilylated derivative in a methylene chloride/pyridine mixture in a 3:1 ratio and then adding a toluene solution containing phosgene to the methylene chloride/pyridine mixture under a nitrogen atmosphere.

18. (New) The process of claim 15, wherein the 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-deacetylbaccatine III or the 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-deacetylbaccatine V is reacted with LiHMDS in anhydrous THF.

19. (New) The process of claim 15, wherein lithium salt of the 10-hydroxyl group of the 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-deacetylbaccatine III or the lithium salt of the 10-hydroxyl group of the 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-deacetylbaccatine V is acetylating with acetyl chloride.

20. (New) The process of claim 15, wherein the the 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-acetylbaccatine III or the 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-acetylbaccatine V is reacted with the (4S,5R)-N-Boc-2-(2,4-dimethoxyphenyl)-4-isobutyl-1-oxazolidine-5-carboxylic acid in an anhydrous apolar organic solvent in the presence of a base and of a condensing agent.

21. (New) The process of claim 20, wherein the condensing agent is dicyclohexylcarbodiimide.

22. (New) The process of claim 15, wherein the 7-triethylsilyl group is removed from the 7-triethylsilyl group from the C-13 esterified 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-acetylbaccatine III or the C-13 esterified 1,14 carbonate 7-triethylsilyl 14 β -hydroxy-10-acetylbaccatine V with pyridinium fluoride in a acetonitrile/pyridine solution under nitrogen, and the dimethoxybenzylidene group is removed from the C-13 esterified 1,14 carbonate 7-hydroxyl 14 β -hydroxy-10-acetylbaccatine III or the C-13 esterified 1,14 carbonate 7-hydroxy 14 β -hydroxy-10-acetylbaccatine V in a methylene chloride solvent by addition of methanolic HCl followed by NaHCO₃.

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23. (New) A process for preparing 13-(N-Boc- β -isobutylisoserinyl)-14 β -hydroxy-baccatine III 1,14-carbonate or 13-(N-Boc- β -isobutylisoserinyl)-14 β -hydroxy-baccatine V 1,14-carbonate, comprising:

- acetylating the C-10 hydroxyl of 14 β -hydroxy-10-deacetylbaccatine III or 14 β -hydroxy-10-deacetylbaccatine V to provide 14 β -hydroxy-10-acetylbaccatine III or 14 β -hydroxy-10-acetylbaccatine V;
- reacting the 14 β -hydroxy-10-acetylbaccatine III or 14 β -hydroxy-10-acetylbaccatine V with phosgene to provide a 1,14 carbonate derivative of 14 β -hydroxy-10-acetylbaccatine III or 1,14 carbonate derivative of 14 β -hydroxy-10-acetylbaccatine V;
- silylating the C-7 hydroxyl of the 1,14 carbonate derivative of 14 β -hydroxy-10-acetylbaccatine III or the 1,14 carbonate derivative of 14 β -hydroxy-10-acetylbaccatine V to provide a 7-silyl 1,14 carbonate derivative of 14 β -hydroxy-10-acetylbaccatine III or a 7-silyl 1,14 carbonate derivative;
- reacting the 7-silyl 1,14 carbonate derivative of 14 β -hydroxy-10-acetylbaccatine III or the 7-silyl 1,14 carbonate derivative of 14 β -hydroxy-10-acetylbaccatine V with (4S,5R)-N-Boc-2- (2,4-dimethoxyphenyl) -4-isobutyl-1-oxazolidine-5- carboxylic acid to provide a C-13 esterified 7-silyl 1,14

carbonate derivative of 14 β -hydroxy-10-acetylbaccatine III or a C-13 esterified 7-silyl 1,14 carbonate derivative of 14 β -hydroxy-10-acetylbaccatine V;

e. removing the 7-triethylsilyl group from the C-13 esterified 7-silyl 1,14 carbonate derivative of 14 β -hydroxy-10-acetylbaccatine III or the C-13 esterified 7-silyl 1,14 carbonate derivative of 14 β -hydroxy-10-acetylbaccatine V to provide a C-13 esterified 7-hydroxy 1,14 carbonate derivative of 14 β -hydroxy-10-acetylbaccatine III or a C-13 esterified 7-hydroxy 1,14 carbonate derivative of 14 β -hydroxy-10-acetylbaccatine V; and

f. removing a dimethoxybenzylidene group from the C-13 esterified 7-hydroxy 1,14 carbonate derivative of 14 β -hydroxy-10-acetylbaccatine III or the C-13 esterified 7-hydroxy 1,14 carbonate derivative of 14 β -hydroxy-10-acetylbaccatine V to provide 13-(N-Boc- β -isobutylisoserinyl)-14 β -hydroxy-baccatine III 1,14-carbonate or 13-(N-Boc- β -isobutylisoserinyl)-14 β -hydroxy-baccatine V 1,14-carbonate.

24. (New) The process of claim 23, wherein the C-10 hydroxyl of 14 β -hydroxy-10-deacetylbaccatine III or 14 β -hydroxy-10-deacetylbaccatine V is acetylated with acetic anhydride in the presence of cerium, scandium, and/or ytterbium salts.

25. (New) The process of claim 24, wherein the salt is CeCl₃·H₂O.

26. (New) The process of claim 23, wherein 14 β -hydroxy-10-acetylbaccatine III or 14 β -hydroxy-10-acetylbaccatine V is reacted with phosgene by dissolving the 14 β -hydroxy-10-acetylbaccatine III or 14 β -hydroxy-10-acetylbaccatine V in a methylene chloride/pyridine mixture in a 3:1 ratio and then adding a toluene solution containing phosgene to the methylene chloride/pyridine mixture under a nitrogen atmosphere.

27. (New) The process of claim 23, wherein the C-10 hydroxyl of 14 β -hydroxy-10-deacetylbaccatine III or 14 β -hydroxy-10-deacetylbaccatine V is acetylated with acetyl chloride.

28. (New) The process of claim 23, wherein the 7-silyl 1,14 carbonate derivative of 14 β -hydroxy-10-acetylbaccatine III or the 7-silyl 1,14 carbonate derivative of 14 β -hydroxy-10-acetylbaccatine V is reacted with (4S,5R)-N-Boc-2-(2,4-dimethoxyphenyl)-4-isobutyl-1-oxazolidine-5-carboxylic acid is reacted with (4S,5R)-N-Boc-2-(2,4-dimethoxyphenyl)-4-isobutyl-1-oxazolidine-5-carboxylic acid in an anhydrous apolar organic solvent in the presence of a base and a condensing agent.

29. (New) The process of claim 28, wherein the condensing agent is dicyclohexylcarbodiimide.

AM 30. (New) The process of claim 23, wherein the triethylsilyl protective group is removed from the the C-13 esterified 7-silyl 1,14 carbonate derivative of 14 β -hydroxy-10-acetylbaccatine III or the C-13 esterified 7-silyl 1,14 carbonate derivative of 14 β -hydroxy-10-acetylbaccatine V with pyridinium fluoride in a acetonitrile/pyridine solution under nitrogen, and the dimethoxybenzylidene group is removed from the C-13 esterified 7-hydroxy 1,14 carbonate derivative of 14 β -hydroxy-10-acetylbaccatine III or the C-13 esterified 7-hydroxy 1,14 carbonate derivative of 14 β -hydroxy-10-acetylbaccatine V in a methylene chloride solvent by addition of methanolic HCl followed by NaHCO₃.

31. (New) A process for preparing (4S, 5R)-N-Boc-2-(2,4-dimethoxyphenyl)-4-isobutyl-1-oxazolidine-5-carboxylic acid, comprising:

- a. protecting an amino group of a leucinol with Boc to form N-Boc-L-leucinol;
- b. converting of the N-Boc-L-leucinol into N-Boc-L-leucinal;
- c. preparing a cyanhydrin nitrile from the N-Boc-L-leucinal;
- d. transforming the cyanhydrine nitrile into a carboxylic acid;
- e. forming of a methyl ester of the carboxylic acid from the carboxylic acid;
- f. purifying the methyl ester of the carboxylic acid;
- g. condensing the methyl ester of the carboxylic acid with 2,4-dimethoxybenzaldehyde dimethyl acetal to form (4S,

5R)-N-Boc-2-(2,4-dimethoxyphenyl) -4-isobutyl-1-oxazolidine-5-carboxylic acid methyl ester; and

h. transforming the (4S, 5R)-N-Boc-2-(2,4-dimethoxyphenyl) -4-isobutyl-1-oxazolidine-5-carboxylic acid methyl ester into the (4S, SR)-N-Boc-2-(2,4-dimethoxyphenyl)-4- isobutyl-1-oxazolidine-5-carboxylic acid.

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32. (New) A method of treating cancer in a patient in need thereof comprising administering to said patient a therapeutically effective amount of a compound of claim 1.

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33. (New) The method of claim 32, wherein the compound is administered in an amount of from 50 to 500 mg/m².

34. (New) The compound 14 β -hydroxy baccatine III.

35. (New) The compound 14 β -hydroxy baccatine V.

36. (New) The compound 14 β -hydroxy baccatine III 1,14 carbonate.

37. (New) The compound 14 β -hydroxy baccatine V 1,14 carbonate.

38. (New) The compound 14- β -hydroxy-7-Tes-10-deacetyl baccatine III.

39. (New) The compound 14- β -hydroxy-7-Tes-10-deacetyl baccatine V.

40. (New) The compound 14- β -hydroxy-7-Tes-baccatine III.

41. (New) The compound 14- β -hydroxy-7-Tes-baccatine V.

42. (New) The compound 14- β -hydroxy-7-Tes-baccatine III 1,14-carbonate.

AM 43. (New) The compound 14- β -hydroxy-7-Tes-baccatine V
1,14-carbonate.

44. (New) The compound (4S,5R)-N-Boc-2- (2,4-dimethoxyphenyl)
-4-isobutyl-1-oxazolidine-5-carboxylic acid.

45. (New) A pharmaceutical composition comprising the compound of
claim 1 and one or more pharmaceutically acceptable carriers and/or excipients.